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10/674,667	09/30/2003	Francis M. Creighton IV	5236-000440	5015
28997 7590 05/20/2011 HARNES, DICKEY, & PIERCE, P.L.C 7700 Bonhomme, Suite 400 ST. LOUIS, MO 63105			EXAMINER RAMIREZ, JOHN FERNANDO	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte FRANCIS M. CREIGHTON IV, ROGERS C. RITTER,
ANDREW F. HALL, and ROGER N. HASTINGS

Appeal 2011-005463
Application 10/674,667
Technology Center 3700

Before ERIC GRIMES, LORA M. GREEN, and RICHARD M.
LEBOVITZ, *Administrative Patent Judges*.

GREEN, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the
Examiner's rejection of claims. We have jurisdiction under 35 U.S.C.
§ 6(b).

STATEMENT OF THE CASE

Claims 39, 41, and 45 are the independent claims on appeal, and read as follows:

39. A compound magnet assembly having a front face and comprising a plurality of segments, the segments each magnetized to provide the maximum magnetic field in a selected direction at a selected operating point spaced from the front face of the compound magnet assembly.

41. A compound magnet assembly having a front and a back face and comprising a plurality of segments, the segments each magnetized to provide substantially the maximum magnetic field in a selected direction at a selected operating point spaced from the front face, the back face being substantially contoured to follow a surface of constant contribution to magnetic field in the selected direction at the operating point.

45. A compound magnet assembly for applying a magnetic field in a select direction at a selected operating point, the magnet assembly comprising a front face generally facing the operating point, and an at least approximately curved back face facing away from the operating point, the back face generally conforming to a constant contribution surface of the magnetic field in the selected direction.

The following ground of rejection is before us for review:

Claims 39-41, 45-47, 51, and 52 stand rejected under 35 U.S.C.

§ 102(b) as being anticipated by Koike.¹

We reverse.

ISSUE

Has the Examiner established by a preponderance of the evidence that Koike teaches a magnet having a front face and comprising a plurality of segments, wherein the segments are each magnetized to provide the

¹ Koike et al, US 3,971,963, issued July 27, 1976.

[substantially] maximum magnetic field in a selected direction at the same selected operating point generally facing or spaced from the front face?

FINDINGS OF FACT

FF1 We reiterate the findings made in the Background section of Appeal No. 2008-4386 (2008-4346 Decision, pp. 2-5).²

FF2 The Examiner's statement of the anticipation rejection may be found at pages 4-5 of the Answer.

FF3 The Examiner finds that Koike teaches a magnet assembly comprising "a plurality of segments (e.g. 62, 62', 66, 66') of permanent magnet material configured . . . in parallel manner to form a compound magnet assembly" (Ans. 4).

FF4 Figure 3 of Koike is reproduced below:

² Decision 2008-004346 was decided on December 18, 2009, in which the Examiner was reversed. After that Decision, the Examiner reopened prosecution, which ultimately led to the instant Appeal.

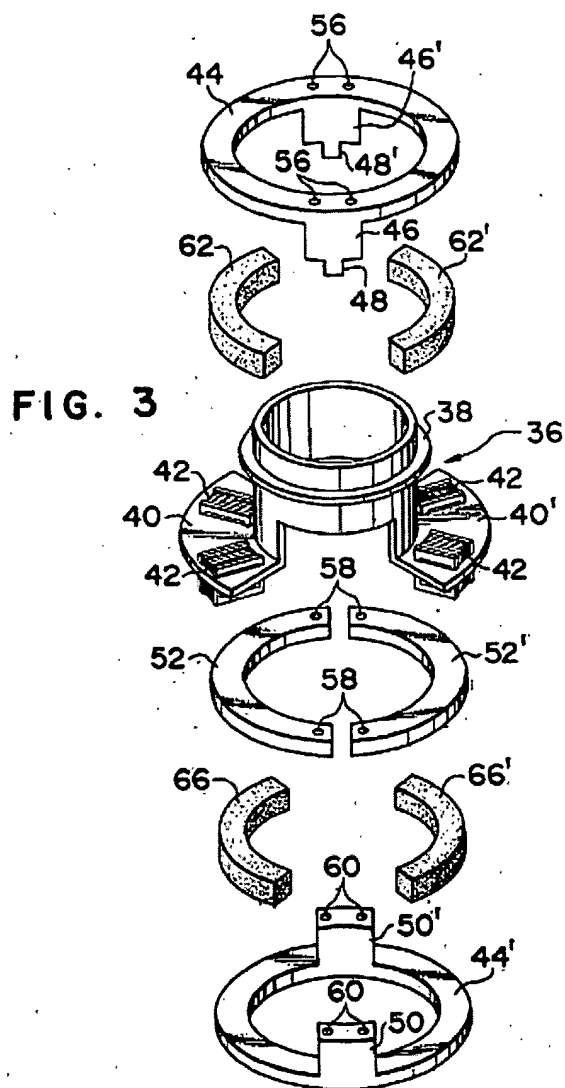


Figure 3 is “an exploded perspective view showing the rotary motion arrangement in a dissembled form” (Koike, col. 3, ll. 17-18).

FF5 The Examiner finds that the inside of magnet 62 is the front face, and the back of 62' is the curved back face (Ans. 5).

FF6 As to having an operating point spaced from the front face of the magnet, the Examiner relies on Koike for teaching:

More specifically, the present invention provides an electromagnetic rotary motion device which generally comprises stationary magnetic flux generating means formed with at least one arcuately curved continuous air gap concentric with the cylindrical structure and establishing a substantially uniform magnetic field flowing in a direction parallel to an axis of the cylindrical structure through the air gap, armature means concentric with the flux generating means and rotatable along the air gap about the axis of the cylindrical structure through an angle substantially proportional to a d.c. current applied to the armature means, and means interconnecting the armature means and the cylindrical structure for transmitting the rotation of the armature means to the cylindrical structure.

(*Id.* at 9, quoting Koike, col. 2, ll. 29-55.)

FF7 Koike also teaches that the split magnets 62 and 62' "establish constant magnetic fields in diametrically opposed semi-circular air gaps **64** and **64'**," and the second pair of split magnets 66 and 66' "establish a magnetic field in diametrically opposed semi-circular air gaps **68** and **68'**" (Koike, col. 5, ll. 33-45).

PRINCIPLES OF LAW

In order to establish anticipation, every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim. *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383 (Fed. Cir. 2001).

ANALYSIS

Appellants argue that Koike “has separate magnets 62, 62’ that generate one magnetic field in diametrically opposed air gaps (64, 64’) inside [*Koike’s*] stator at a first location, and separate magnets (66, 66’) that generate another magnetic field in diametrically opposed air gaps (68, 68’) inside [*Koike’s*] stator at a second location” (App. Br. 7; *see also* FF7). Appellants assert that the magnet of Koike does not read on a segmented magnet that provides a magnetic field at a selected operating point spaced from the front face of the compound magnet. (App. Br. 9)

We agree with Appellants. We recognize that during prosecution before the Office, claims are to be given their broadest reasonable interpretation consistent with the Specification as it would be interpreted by one of ordinary skill in the art. *In re American Academy of Science Tech Center*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). All of the independent claims on appeal require a magnet having a front face and comprising a plurality of segments, wherein the segments are each magnetized to provide the [substantially] maximum magnetic field in a selected direction at the same selected operating point generally facing or spaced from the front face. The Examiner does not explain how the limitation of a “front face of a magnet” is met by the face of the interior cavity of the magnet shown in Figure 3 of Koike. Moreover, based on the Specification and the Figures, such as Figure 9 of the instant disclosure, we conclude that one of ordinary skill in the art would not interpret a “front face” wherein “the segments [are] each magnetized to provide the [substantially] maximum magnetic field in a selected direction at a selected operating point spaced from the front face” as

encompassing the magnet 62 of assembly of Koike (FF5). Thus, the Examiner has not met the burden of setting forth a prima facie case of anticipation, and the rejection is reversed.

CONCLUSION OF LAW

We conclude that the Examiner has not established by a preponderance of the evidence that Koike teaches a magnet having a front face and comprising a plurality of segments, wherein the segments are each magnetized to provide the [substantially] maximum magnetic field in a selected direction at the same selected operating point generally facing or spaced from the front face. We thus reverse the rejection of claims 39-41, 45-47, 51, and 52 under 35 U.S.C. § 102(b) as being anticipated by Koike.

REVERSED

alw